ABSTRACT:

A method for extracting geometrical data from a 2-D digital image of the spine, comprising steps for determining spine outlines, endplates and corners wherein:

- digitizing the spine center line and end points;
- constructing a 2-D image band, referred to as Rubber-Band, whose center line is a spline representing the spine center line, and unfolding said Rubber-Band for constructing a 2-D Rectangular-Band;
- processing the 2-D Rectangular-Band image data in order to estimate best paths going through selected points for determining the spine outlines, then the endplates based on the found outline data and the corners at the intersection of the outlines and endplates.